**Amendments to the Specification:**

Replacement Paragraphs:

1. Please replace the previously amended paragraph (amended in a Response/Amendment of April 14, 2003), which was originally the first full paragraph on page 4 (lines 1-2) of the Specification as filed with the following amended paragraph - the amended paragraph is identical to the original paragraph in the Specification as filed:

> FIG. 4 shows one embodiment for illustrative purposes a cross section of the thin film circuitry.

2. Please replace the previously amended paragraph (amended by Response/Amendment of April 14, 2003 and Amendment Under 37 CFR 1.116 of October 2, 2003), which was originally the third full paragraph on page 7 of the Specification as filed (lines 26-31) and continuing to the first partial paragraph of page 8 (lines 1-7) with the following amended paragraph - the amended paragraph is intended to be identical to the original paragraph in the Specification as filed:

> FIG. 4 illustrates a cross section of a portion of the printhead 100 of FIG. 1 in one embodiment, for illustrative purposes only. The layers of FIG. 4 are presented as an illustration and are not to scale. Referring to FIG. 1 and FIG. 2 along with FIG. 4, in one embodiment, the primitives 1-n 108, 110 are made of thin film circuitry and include an orifice plate 315 with nozzles 318 mounted on a barrier 375. Also included is a metal stack comprised of a first metal layer 402 and a second metal layer 404. The first metal layer can be Aluminum Copper Silicon. The second metal layer 404 is conformed with plural vias 406 (FIG. 4 illustrates one via and one resistor for illustrative purposes only) and includes a top conductive metal 400 and metal 407, which at one portion is the resistor 112 and at another portion is a separation barrier 408. Also, other layers 411 are included, but are not described here for simplicity.

3. Please replace the previously amended paragraph (amended by Response/Amendment of April 14, 2003 and Amendment Under 37 CFR 1.116 of October 2, 2003), which was originally the second full paragraph on page 8 (lines 8-17) of the Specification as filed, with the following paragraph:

> The vias 406 form an interface between the first metal layer 402 and the second metal layer 404 for providing power and control to the resistors. Also, the vias 406 form a blockade between the second metal layer 404 and a substrate 409. The substrate 409 could be tetraethylorthosilicate (TEOS) or some such other compound. Portions of the metal 407 in the ~~The~~ predefined vias 406 form the separation barrier 408 between conductive portions of a thin film resistor 112 and an associated power bus 128. The barrier 408 is preferably made of a non-corrosive material, such as Tantalum Aluminum, Tungsten Silicon Nitride, Tantalum Nitride. As a result, the electrical properties of the circuit are minimally affected while decreasing the possibility of an electrical open.

This replacement paragraph is similar to the original paragraph in the Specification as filed, except for the addition of the words "Portions of the metal 407 in" at the beginning of the sentence starting with "The predefined vias . . . ." The change is supported in the Specification as filed at FIG. 4.

4. Please replace the last full paragraph of page 8 (lines 26-31) continuing onto the first paragraph of page 9 (lines 1-2) of the Specification as filed, with the following paragraph:

> FIG. 5 is one embodiment that shows a portion of a primitive of the printhead for illustrative purposes. Referring to FIG. 1 along with FIGS. 4-5, power is sent from the power bus 128 to the resistors 1-n 112, 113, 116 through the power vias 140, 142. Control signals are sent to the resistors 1-n 112, 113, 116 through the FET vias 150, 152, 154. The vias 140, 142, 150, 152, 154 are defined by

the second metal layer 404 and the separation barrier 408 to create separation between the power bus and ink contamination.

This replacement paragraph is similar to the original paragraph in the Specification as filed, except that the reference numeral following "power bus" has been changed to 128. This change is supported in the Specification as filed at least at FIG. 1 and page 8, lines 12-14.

Deletions:

1. Please delete the previously added paragraph (added by Response/ Amendment filed April 14, 2003), which was added after the first full paragraph on page 4 of the Specification as originally filed. Amended page 4 is intended to be identical to page 4 in the Specification as filed, after deletion of this paragraph and together with the amendment to the first full paragraph on page 4 of the Specification as filed, as discussed above.

2. Please delete the previously added paragraph (added by Amendment Under 37 CFR 1.116 filed October 2, 2003 and entered by RCE filed November 1, 2003), which was added after the second full paragraph on page 8 (lines 8-17) of the Specification as filed.